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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,907	11/20/2000	Geert Florimond Gerard Depovere	PHN 17,772	8131

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
SHERKAT, AREZOO	
ART UNIT	**PAPER NUMBER**
2131	13

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/716,907	DEPOVERE ET AL.	
	Examiner	Art Unit	
	Arezoo Sherkat	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

Applicant's arguments, see pages 8-9, filed on April 13th, 2004, with respect to the rejection(s)of claim(s) 1-11 under 102(e) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Linnartz, Brust, and Nakano.

DETAILED ACTION

Claims 1-11 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-5, and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Linnartz, (U.S. Patent No. 5,933,798 and Linnartz hereinafter).

Regarding claim 1, Linnartz discloses a method of embedding a watermark in an information signal, comprising the steps:

analyzing a given property of the information signal and determining an actual value of said property, associating different watermarks in a plurality of watermarks with distinct values of said property, and selecting the watermark from said plurality of watermarks associated with said actual value for embedding in the information signal (i.e., the luminance value p(n) and watermark data value wi(n) are added by an adder 12 pixel by pixel)(Col. 2, lines 1-67 and Col. 3, lines 1-35).

Regarding claims 2 and 6, Linnartz does not expressly disclose the method as claimed in claim 1, in which the information signal is a sequence of video images, and said analyzing step comprises:

analyzing a spatial or temporal distribution of luminance values, each distinct distribution of luminance values constituting a value of said property of the information signal (i.e., the video image is assumed to represent a vertical transition from a luminance value 10 to a luminance value of 80. the range of luminance values p(n) is assumed to be 0-255)(Col. 2, lines 1-67 and Col. 3, lines 1-35).

Regarding claims 4 and 8, Linnartz discloses the method as claimed in claim 1, in which each embedded watermark is a combination of two or more basic watermark patterns constituting a set of basic watermark patterns, said set of basic watermark patterns being selected from different sets of basic watermark patterns in dependence upon the actual value of the property of the information signal (Col. 2, lines 15-64).

Regarding claim 5, Linnartz discloses a method of detecting a watermark in an information signal, comprising the steps:

analyzing a given property of the information signal and determining an actual value of said property, associating different watermarks plurality of watermarks with distinct values of said property, and selecting and detecting the watermark from said plurality of watermarks associated with said actual value (Col. 4, lines 27-67 and Col. 5, lines 1-67 and Col. 6, lines 1-40).

Regarding claim 9, Linnartz discloses a watermark embedder for embedding a watermark in an information signal, comprising:

means for analyzing a given property of the information signal and determining an actual value of said property, means for associating different watermarks in a plurality of watermarks with distinct values of said property, and means for selecting the watermark from said plurality of watermarks associated with said actual value for embedding in the information signal (i.e., the luminance value p(n) and watermark data value wi(n) are added by an adder 12 pixel by pixel)(Col. 2, lines 1-67 and Col. 3, lines 1-35).

Regarding claim 10, Linnartz discloses a watermark detector for detecting a watermark in an information signal, comprising:

means for analyzing a given property of the information signal and determining an actual value of said property, means for associating different watermarks in a

plurality of watermarks with distinct values of said property, and means for selecting and detecting the watermark from said plurality of watermarks associated with said actual value (Col. 4, lines 27-67 and Col. 5, lines 1-67 and Col. 6, lines 1-40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linnartz, (U.S. Patent No. 5,933,798 and Linnartz hereinafter, in view of Brust, (U.S. Patent No. 5,260,648 and Brust hereinafter).

Teachings of Linnartz have been discussed previously.

Regarding claims 3 and 7, Linnartz does not expressly disclose the method as claimed in claim 1, in which the information signal is a sequence of audio signal segments, and said analyzing step comprises: analyzing a shape of the frequency spectrum of said audio segments, each distinct shape of the frequency spectrum constituting a value of said property of the information signal.

However, Brust discloses analyzing a shape of the frequency spectrum of said audio segments, each distinct shape of the frequency spectrum constituting a value of said property of the information signal (i.e., in Fig. 6b, the measured spectrum consists

of two pairs of peaks characterizing the two spectral lines of the measuring signal)(Col. 8, lines 27-67 and Col. 9, lines 1-52).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Linnartz with the teachings of Brust because it would allow to include analyzing a shape of the frequency spectrum of said audio segments, each distinct shape of the frequency spectrum constituting a value of said property of the information signal with the motivation to provide for apparatus for performing a rapid analysis of the spectrum of a signal at one or several points of measurement, and for determining the spatial distribution of individual spectral lines (Brust, Col. 1, lines 5-12).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Linnartz, (U.S. Patent No. 5,933,798 and Linnartz hereinafter, in view of Nakano, (U.S. Patent No. 6,510,233 and Nakano hereinafter).

Regarding claim 11, Linnartz discloses the watermark embedder as claimed in claim 9, wherein said watermark embedder further comprises:

a watermark detector for detecting a watermark in an information signal, comprising: means for analyzing a given property of the information signal and determining an actual value of said property, means for associating different watermarks in a plurality of watermarks with distinct values of said property, and means

for selecting and detecting the watermark from said plurality of watermarks associated with said actual value (Col. 2, lines 1-67 and Col. 3, lines 1-35).

However, Linnartz does not expressly disclose means for refraining from embedding the selected watermark in response to said watermark detector detecting said selected watermark in the information signal.

However, Nakano discloses means for refraining from embedding the selected watermark in response to said watermark detector detecting said selected watermark in the information signal (Col. 7, Page 17-36).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Linnartz with the teachings of Nakano because it would allow to include the means to prevent electronic watermark data to be inserted into the input image more than once with the motivation to prevent degradation in image quality (Nakano, Col. 4, lines 18-40).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (703) 305-8749. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A Sherkat

Arezoo Sherkat
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June 21, 2004

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